

and Atlantic City, the latter in the month of March. Judging from the hopeless way in which it becomes entangled in the sandbanks and shoals of a shallow coast, it would seem to be unaccustomed to such impediments, and is probably a deep-water species. It is also worthy of note that the Overstrand *Mesoplodon* was within a short time of giving birth to a young one, whereas the young of the *Hyperoodon* are produced in the months of May and June.

Notwithstanding the very great advance which has been made in our knowledge of the Cetacea of late years, we are still very ignorant with regard to the habits and distribution of many species, and it is most desirable to place on record every circumstance which may tend, even indirectly, to throw light on a subject of so much interest.

#### EXPLANATION OF PLATE XV.

*Fig. 1.* *Mesoplodon bidens*, ♀, seen from the left side. Scale 1 : 40. The arrow *a* indicates the position of the blow-hole; *b*, gular sulcus; *c*, eye; *d*, external auditory meatus.

*Fig. 2.* Fœtus which belonged to the above specimen, seen from the left and slightly from the ventral side. From a photograph taken by Mr. W. D. Harmer. Scale 1 : 12. *b* and *c* as above; *e*, right pectoral limb.

#### XLVII.—Note on the Genera *Geothauma* and *Gyrostropha*. By EDGAR A. SMITH.

THE genus *Geothauma* has recently been proposed by M. Crosse \* for the reception of that most wonderful little shell described by Lieut.-Col. Godwin-Austen under the name of *Opisthostoma grandispinosum*. M. Crosse considers the trochoid form, the spinous ornamentation, and the manner in which the last whorl is produced upward to the top of the spire of sufficient importance to distinguish it generically from the typical species of *Opisthostoma* from India. Many of the characters given in the diagnosis of the genus are specific rather than generic. This may have arisen from the fact that M. Crosse appears to have had but a single species in view at the time. At all events, it is unsatisfactory that he has not expressed his views regarding the other known species of *Opisthostoma* from Borneo, namely *O. de Crespignyji*, H. Adams, *O. Wallacei*, Ancey, and *O. pulchellum* and

\* Journ. de Conch. 1892, p. 282.

*O. Hosei* of Godwin-Austen. In addition to these I have just described five other species from the same island.

A careful study of all these species seems to prove that the genus *Geothauma* is not required, at all events at present.

The form is sometimes as "pupiform" as in the Indian species, e. g. *O. baritense*, Smith; the last whorl in *O. basanense*, Smith, ascends and presses against the penultimate, and the sculpture varies from the finest lamellæ, as in *O. baritense* and *O. Wallacei*, to much stronger lamellations, as in *O. jucundum*, Smith. In *O. pulchellum* the lamellæ are produced at the middle of the whorls, occasionally forming hollow spine-like projections. In *O. Everetti*, Smith, these productions are still more developed, and in *O. mirabile*, Smith, they are as remarkable as in *O. grandispinosum*.

The height to which the last whorl may be produced upward is also a matter of degree. For instance, in *O. Hosei* and *Everetti* it rises almost as high as the top of the spire, whereas in *O. baritense* it does not ascend beyond the penultimate whorl. Most conchologists would at a glance confess that these ten species from Borneo are evidently modifications of one type; and, even supposing that they differed materially from the Indian forms, which is not the case, a new generic name was not required for them.

In 1865 Mr. H. Adams\* described the genus *Plectostoma* for the *O. de Crespigny*, and this, as it does not appear to have been preoccupied in any other branch of zoology, is still available. However, until some distinguishing differences are discovered in the anatomy of the animals, it seems to me altogether impossible with reason to separate the Indian and Bornean species on conchological grounds †.

In my opinion the genus or subgenus *Gyrostropha* is equally useless. It was suggested by M. Ancey ‡ to include *O. pauluccie*, Crosse and Nevill, and *O. perakensis*, Godwin-Austen and Nevill, from Perak. He considered that they should be separated from the typical Indian forms, because the summit of the spire was supposed to be roundly obtuse or subglobose and the aperture situated almost in a vertical plane parallel to the axis. Can anything be more trivial than this? We might as well separate generically shells having but five instead of five and a half volutions!

\* Ann. & Mag. Nat. Hist. 1865, vol. xv. p. 177.

† Mr. W. T. Blanford has already expressed a similar opinion (Ann. & Mag. Nat. Hist. 1867, vol. xix. pp. 305, 306).

‡ Bull. Soc. Mal. France, 1887, p. 275.